

ABSTRACT

A gear coupler for a power transmission comprises an outer race having an cylindrical inner surface and an inner race having a cylindrical outer surface with spaced apart ramped surfaces. A plurality of rollers are seated between the inner and outer race. A controllable cage has a plurality of cage pins seated between adjacent pairs of rollers and engages the rollers with the ramped surfaces. A shifting ring is coupled to the cage for axial movement therealong for selectively aligning the rollers between the ramped surfaces to disengage the inner race from the outer race and allow relative rotation therebetween and for wedging the rollers against the ramped surface to engage the inner race with the outer race and prevent relative rotation therebetween in response to varying rotational speeds of the inner and outer race.